b.) Remarks

Claims 1, 3, 4(a)-18, 24, 52 and 53 have been rejected under 35 U.S.C. §112, first paragraph, as containing subject matter not described in the specification so as to convey to one skilled in the art that the inventors had possession of the claimed invention when the application was filed. Although this rejection is respectfully traversed, solely in order to reduce the issues and expedite prosecution, claims 1 and 3 have been cancelled. Accordingly, the rejection is plainly overcome.

Claims 1, 3-5, 7-8, 10, 12-18, 24, 52-53 are rejected under U.S.C. §102(b) as being anticipated by Lowe et al. (*J. Biol. Chem.* Vol. 266, No. 26 (1991) 17467-77. In support of this rejection, the Examiner questions that Lowe's human α-1,3 fucose transference transfers fucose to N-acetylglucosamine residue in an α 2,3-sialyl N-acetylglucosamine structure in a non-reducing terminus of a sugar claim via an α 1,3-linkage (see from page 3, line 14 to page 4, line 10, of the office action).

As noted above, claims 1 and 3 are cancelled and claim 4, part (a) is amended to maintain its dependency. The Examiner's remarks need therefore only be addressed regarding claim 4, part (h).

As the Examiner is aware, claim 4, part (h) relates to a DNA hybridizing with DNA selected from (a), (b), (c), (d), (e), (f) and (g) under a highly stringent condition, e.g., using a filter with colony- or plaque-derived DNA immobilized thereon at 65°C in the presence of 0.7-1.0M of NaC1, followed by washing the filter at 65°C with 0.1 standard concentration of SSC solution.

The DNA sequence relied upon by the Examiner encodes the human fucosyltransferase Fuc-TIV and respectively has sequence identities of only 47.2% and 47.8% with the DNA sequence of human Fuc-TIX and mouse Fuc-TIX.

Those skilled in the art understand that DNAs having such a low sequence identity cannot hybridize with each other under the highly stringent condition defined in claim 4, part (h).[1/]

In view of the above amendments and remarks, Applicants submit that all of the Examiner's concerns are now overcome and the claims are now in allowable condition. Accordingly, reconsideration and allowance of this application is earnestly solicited.

Claims 2, 4-18, 24 and 51-53 remain presented for continued prosecution.

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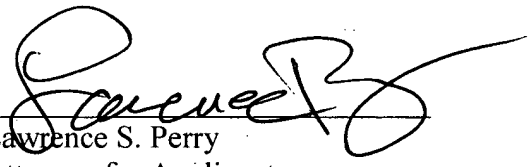
1/ Additionally, the DNA recited in claim 4, part (h) encodes a polypeptide having an activity to transfer focuse to an N-acetylglucosamine residue in an N-acetyllactosamine (Gal $\beta$ 1-4GlcNAc) structure existing in a nonreducing terminus of a sugar chain via an $\alpha$ 1,3-linkage, but not having an activity to transfer fucose to an $\alpha$ 2,3-sialyl N-acetyllactosamine (NeuAc $\alpha$ 2-3Gal $\beta$ 1-4GlcNac) structure existing in a nonreducing terminus of a sugar chain via an $\alpha$ 1,3-linkage. However, as noted, Lowe's human Fuc-TIV has the same activity as mouse Fuc-TIV, that is, to transfer fucose to N-acetylglucosamine residue in an $\alpha$ 2,3-sialyl N-acetylglucosamine structure existing in a nonreducing terminus of a sugar chain via an $\alpha$ 1,3-linkage.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Lawrence S. Perry
Attorney for Applicants
Registration No. 31,865

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

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